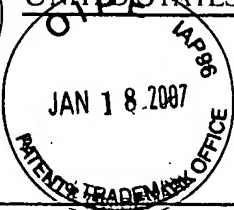




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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,872

03/18/2004

Radoslaw Romuald Zakrzewski

BFM-02801

5468

7590

01/09/2007

Patent Group
Choate, Hall & Stewart
Exchange Place
53 State Street
Boston, MA 02109-2804

EXAMINER

COUGHLAN, PETER D.

ART UNIT

PAPER NUMBER

2129

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

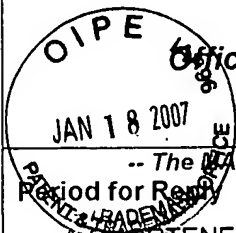
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PAPER

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If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.	Applicant(s)	
10/803,872	ZAKRZEWSKI, RADOSLAW ROMUALD	
Examiner	Art Unit	
Peter Coughlan	2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/21/2004</u> | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claims 1-36 are pending in this application.

35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-36 are rejected under 35 U.S.C. 101 for nonstatutory subject matter.

The computer system must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application. Determining the 'correctness' of a component has no practical value. There needs to be a real world benefit for determining the correctness of a component. The result has to be a practical application. Please see the interim guidelines for examination of patent applications for patent subject matter eligibility published November 22, 2005 in the official gazette.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful,

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tangible and concrete.” If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. No benefits of determining the ‘correctness’ of a component has been claimed.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/ non-unpredictable), AND tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended, and if the specification discloses a practical application but the claim is broader than the disclosure such that it does not require the practical application, then the claim must be amended.

Determining the correctness of a component by calculating mathematical formulas is not statutory. There is no stated reason or benefit for the determination of correctness.

Claims 1, 16-19, 34-36 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. These claims contain the variable δ which is allowed to approach zero. When this occurs, right of the ‘greater than’ symbol approaches

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infinity which should be less than 'M' which needs to be infinity as well. Overall, infinity is less than infinity which makes no sense.

Claims 1, 12, 19, 30 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. These claims contain the variable ϵ which is an accuracy level based on p-est to its true value p in the range of $0 < \delta \leq 1$. This makes no sense due to $1/\delta$ approaches infinity as δ approaches zero.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. This claim states a probability of equal to or less than 6. This makes no sense due to the fact probabilities are in the range of $0 < p < 1$. A probability of 6 means that there is probability of 600% chance of an event occurring. This makes no sense.

Claims 1-4, 8, 12, 19-22, 26, 30 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. All these claims state a 'selection criterion F'. There is no selection criterion stated, just the fact that one exists. Since 'M' can approach infinity, then so can 'F' has to be able to approach infinity.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-36 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); In re Kirk, '376 F.2d 936, 942, 153 USIPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**"). See, MPEP 21107.01 (IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-36 are rejected on this basis.

Claims 1, 12, 19, 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims contain probability 'p' which is not stated in the formula for 'm' in claims 1, 19. Claims 12 and 30 use 'p' in accordance to a selection criterion 'F'.

These claims have to be amended or withdrawn for consideration.

Claims 4, 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims contain 3 functions, $e(x)$, $f(x)$ and $\Phi(x)$. There is no definition for these 3 functions within the specification.

These claims have to be amended or withdrawn for consideration.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process*

Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "correctness" in claims 1, 8, 19 and 26 is used by the claim to be used as a verb similar to the word "correct", while the accepted meaning of the word "correctness" is a noun. The term is indefinite because the specification does not clearly redefine the term. Substituting the word 'noun' for 'correctness' in ¶0009 the sentence '..verifying "noun" of a component...' makes no sense. Another word such as 'accuracy' would eliminate this rejection.

These claims have to be amended or withdrawn for consideration.

Claim 30 recites the limitation "p" in claim 30. There is insufficient antecedent basis for this limitation in the claim. Probability 'p' is not defined in independent claim 30.

This claim have to be amended or withdrawn for consideration.

The term "F" in claims 1-4, 8, 12, 19-22, 26, 30 is a relative term which renders the claim indefinite. The term "F" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The specification defines the term 'F' in ¶0046. The problem arises that 'F' is determined upon M_{lo} or M_{up} . Since these terms ' M_{lo} or M_{up} ' are not defined therefore 'F' is not defined as well.

These claims have to be amended or withdrawn for consideration.

Conclusion

4. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure.

-U. S. Patent Publication 20020035542: Tumey

-U. S. Patent Publication 20020034319: Tumey

-U. S. Patent 6466924: Tateishi

-U. S. Patent 5742702: Oki

5. Claims 1-36 are rejected.

Correspondence Information

6. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3080. Any response to this office action should be mailed to:

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(571) 273-8300 (for formal communications intended for entry.)

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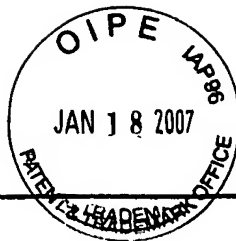


Peter Coughlan

12/14/2006



DAVID VINCENT
SUPERVISORY PATENT EXAMINER



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/803,872
Filing Date	March 18, 2004
First Named Inventor	Radoslaw Romuald Zakrzewski
Art Unit	2184 2129
Examiner Name	Not Yet Assigned /Peter Coughlan/
Attorney Docket Number	BFM-02801

Sheet	1	of	2
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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
PC		US-6,473,746 B1	Oct. 29, 2002	Radoslaw Romuald Zakrzewski	
		US-			
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FOREIGN PATENT DOCUMENTS

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Examiner Signature	/Peter Coughlan/	Date Considered	12/13/2006
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/803,872
				Filing Date	March 18, 2004
				First Named Inventor	Radoslaw Romuald Zakrzewski
				Art Unit	2184 2129
				Examiner Name	Not Yet Assigned /Peter Coughlan/
Sheet	2	of	2	Attorney Docket Number	BFM-02801

NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PC	AA	JAMES O. BERGER, Statistical Decision Theory and Bayesian Analysis – Second Edition, 1985, Springer-Verlag New York, Inc.	<input type="checkbox"/>
	AB	RUSSEL E. CAFLISCH, Monte Carlo and quasi-Monte Carlo methods, 1998, Acta Numerica	<input type="checkbox"/>
	AC	GEORGE S. FISHMAN, Monte Carlo: Concepts, Algorithms, and Applications, 1996, Springer-Verlag New York, Inc.	<input type="checkbox"/>
	AD	JUN S. LIU, Monte Carlo Strategies in Scientific Computing, 2001, Springer-Verlag New York, Inc.	<input type="checkbox"/>
	AE	RAJEEV MOTWANI and PRABHAKAR RAGHAVAN, Randomized Algorithms, 1995, Cambridge University Press	<input type="checkbox"/>
	AF	PEYTON Z. PEEBLES, JR., Probability, Random Variables, and Random Signal Principles – Third Edition, 1993, McGraw-Hill, Inc.	<input type="checkbox"/>
	AG	M. VIDYASAGAR, Statistical Learning Theory and Randomized Algorithms for Control, December 1998, IEEE Control Systems	<input type="checkbox"/>
	AH	ERIC W. WEISSTEIN, Hypersphere, MathWorld – A Wolfram Web Resource, http://mathworld.wolfram.com/Hypersphere.html	<input type="checkbox"/>
↓	AI	RADOSLAW ROMUALD ZAKRZEWSKI, Verification of a Trained Neural Network Accuracy, 2001, IEEE	<input type="checkbox"/>
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			<input type="checkbox"/>
			<input type="checkbox"/>

Examiner Signature	/Peter Coughlan/	Date Considered	12/13/2006
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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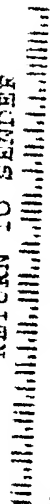
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